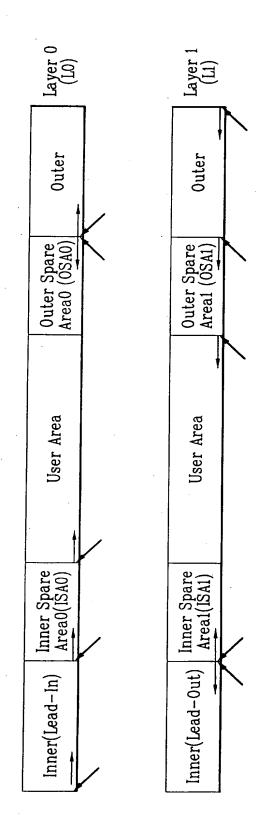
FIG. 1

FIG. 2

<u>TDFL</u>

| Defect_entry #1 | Defect_entry #1 | Defect_entry #1 |
|-----------------|-----------------|-----------------|
| Defect_entry #2 | Defect_entry #2 | Defect_entry #2 |
| | Defect_entry #3 | Defect_entry #3 |
| | | Defect_entry #4 |
| TDDS | TDDS | TDDS |
| 1st update | 2nd update | 3rd update |



using direction in each area start address in each area

FIG. 4A

| 1 cluster | Sector 0 Sector 30 | SBM | FIG. 4B |
|--------------|---------------------|------|---------|
| <u> </u> | Sector 31 | TDDS | |

FIG. 4B

| | contents | Number of Bytes |
|---------------|---|--------------------|
| SBM Header | Un-allocated Space Bitmap Identifier = "UB" Format Version = 00h | 2 |
| | Reserved, 00h Layer Number (0 or 1) Reserved, 00h | 1 4 R |
| | SBM for inner Area Start Cluster First PSN | 4 |
| | Length in inner area Bitmap Data | 4 M |
| | Reserved, 00h | 4 |
| SBM Info | SBM for inner spare Area Start Cluster First PSN | 4 |
| | Length in inner spare area | 4 |
| | Bitmap Data Reserved, 00h | N 4 |
| | SBM for User Area | |
| | Start Cluster First PSN | 4 |
| | Length in user area | -4 |
| | Bitmap Data | 0 |
| | Reserved, 00h | 4 |
| | SBM for outer spare Area Start Cluster First PSN | 4 |
| | Length in outer spare area | 4 |
| | Bitmap Data Reserved, 00h | P 4 |
| | SBM for Outer Area | 4 |
| | Start Cluster First PSN | 4 |
| | Length in outer area | 4 |
| | Bitmap Data | Q |
| | Reserved, 00h | 4 |
| SBM | | |
| Terminator | | |

FIG. 5

